

**AFBF FEDERAL MILK MARKETING ORDER WORKING GROUP**  
**BACKGROUND ON CLASS I LOCATION ADJUSTMENTS**  
**AUGUST 2019**

**Issue:**

*Class I location differentials are an element of the Class I beverage milk price formula. These differentials are fixed in value, ranging from \$1.60 per hundredweight to \$6.00 per hundredweight, and increase regulated milk prices in areas with higher Class I differentials.*

*Class I location differentials were last updated more than a decade ago, based on a U.S. Dairy Sector Simulation Model of supply and demand conditions calibrated to 2008 milk marketing information.*

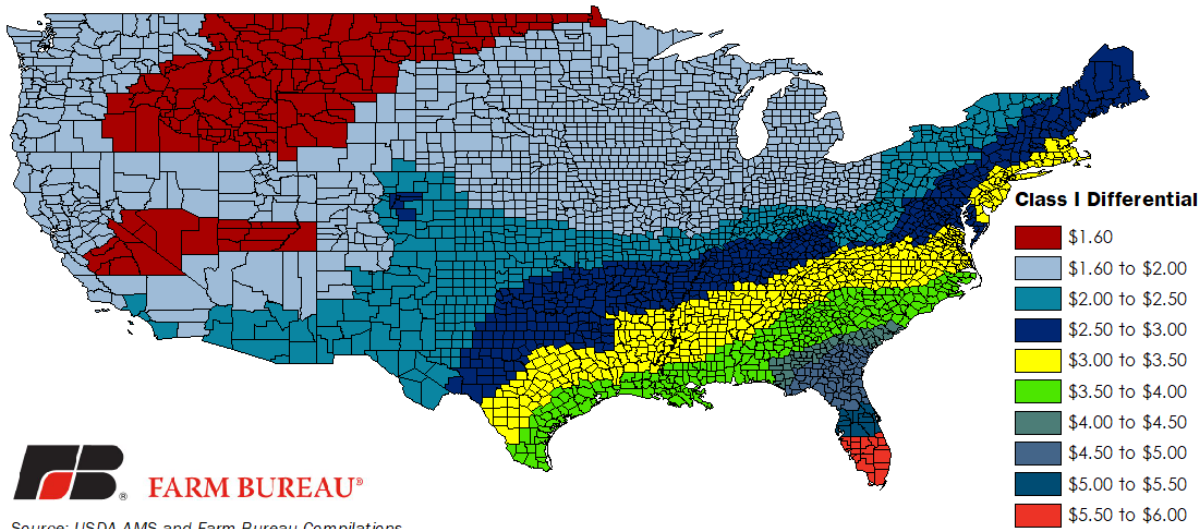
*Location differentials do not vary daily, monthly or seasonally based on the supply and demand for milk. Given that milk supply and demand changes daily, and the model was last updated prior to 2008, there may be interest in re-considering Class I location differentials. The need, value and optimum frequency of updating location differentials should all be considered.*

**Background:**

Every U.S. farmer has a different regulated minimum milk price based on the classified value of milk produced, its components and return from the revenue sharing pool. A critical element of the revenue sharing pool and farm-level milk price is the Class I location differential, which is added to the base value of Class I milk to determine the total value of Class I milk. Every U.S. county is assigned a Class I location differential.

Class I differentials range from \$1.60 per hundredweight in surplus regions such as the Upper Midwest to \$6.00 per hundredweight in deficit regions such as the Southeast and Florida (USDA map of [Class I Location Differentials](#)). Figure 1 highlights the slope of Class I differentials from surplus regions to deficit milk production regions. Deficit milk production regions are areas of the country where milk production is below the needed volume to supply the Class I beverage milk demand.

**Figure 1. Federal Milk Marketing Order  
Class I Price Differential Ranges**

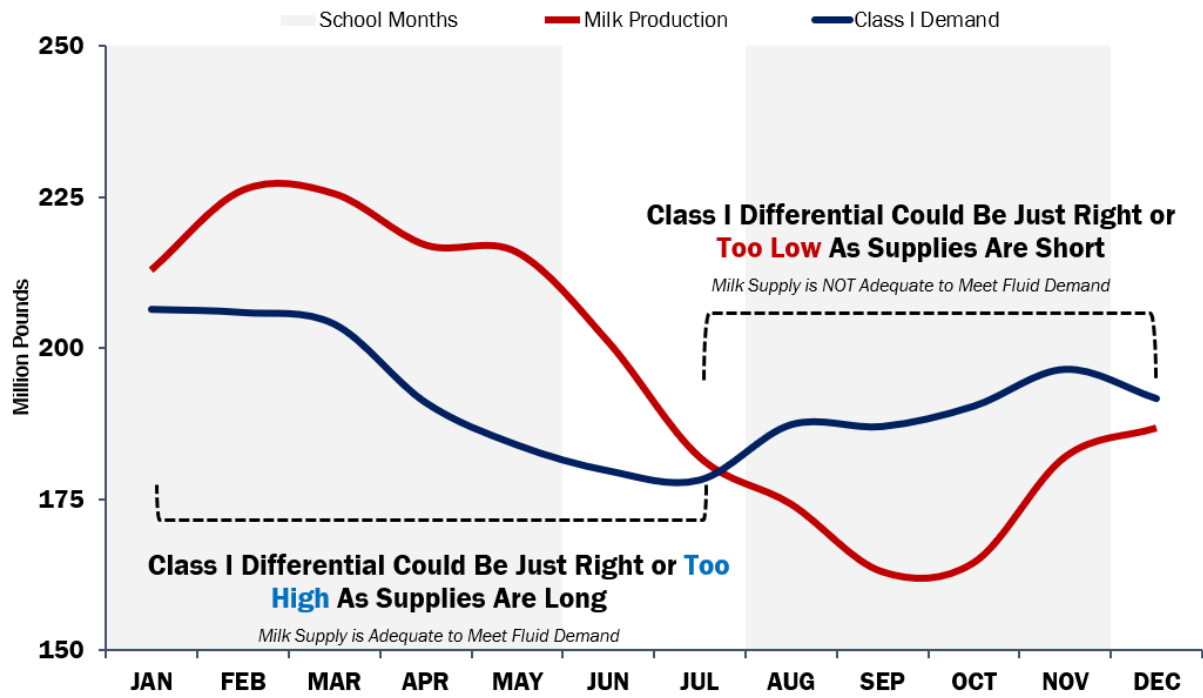


Location differentials were last updated in 2008 based on a linear programming transshipment model of milk supply and demand. The U.S. Dairy Sector Simulator model from [Cornell University](http://www.cornell.edu) estimated shadow values at U.S. milk processing locations. Shadow values effectively represent the cost to the model of supplying an additional hundredweight of milk at a milk processing location and were the basis for the current Class I location adjustments.

The challenge is that milk supply and demand changes daily while milk prices and location adjustments are fixed on both a monthly and annual basis. For example, daily milk receipts at bottling plants fluctuate during the week with peak receipts early in the week and less milk received as the weekend approaches. Additionally, on a monthly basis milk supplies and demand are not always aligned. For example, in the Florida marketing order, milk supplies exceed Class I demand during the first half of the year, but in the second half of the year milk supplies are not enough to meet local demand.

These temporal imbalances result in Class I price and location differentials not being flexible enough to facilitate orderly movement and balancing of milk supplies. Consider that under the current pricing framework, milk cannot be sold to a fluid processing plant at a discount during the weekend to enable balancing. Instead, dairy farmers, their cooperatives or the fluid plant must find a balancing plant within or outside the order to process the milk. This results in supply plants receiving more milk on the weekends and less milk during the week – to ease this balancing, these plants must have idle processing capacity during the week.

**Figure 2. Seasonal Supply and Demand for Fluid Milk in Florida, 2018, 30-Day Month**



Source: USDA NASS, USDA AMS, Farm Bureau Calculations

Current Farm Bureau Policy:

None